

# CSE-484

## Assignment-1

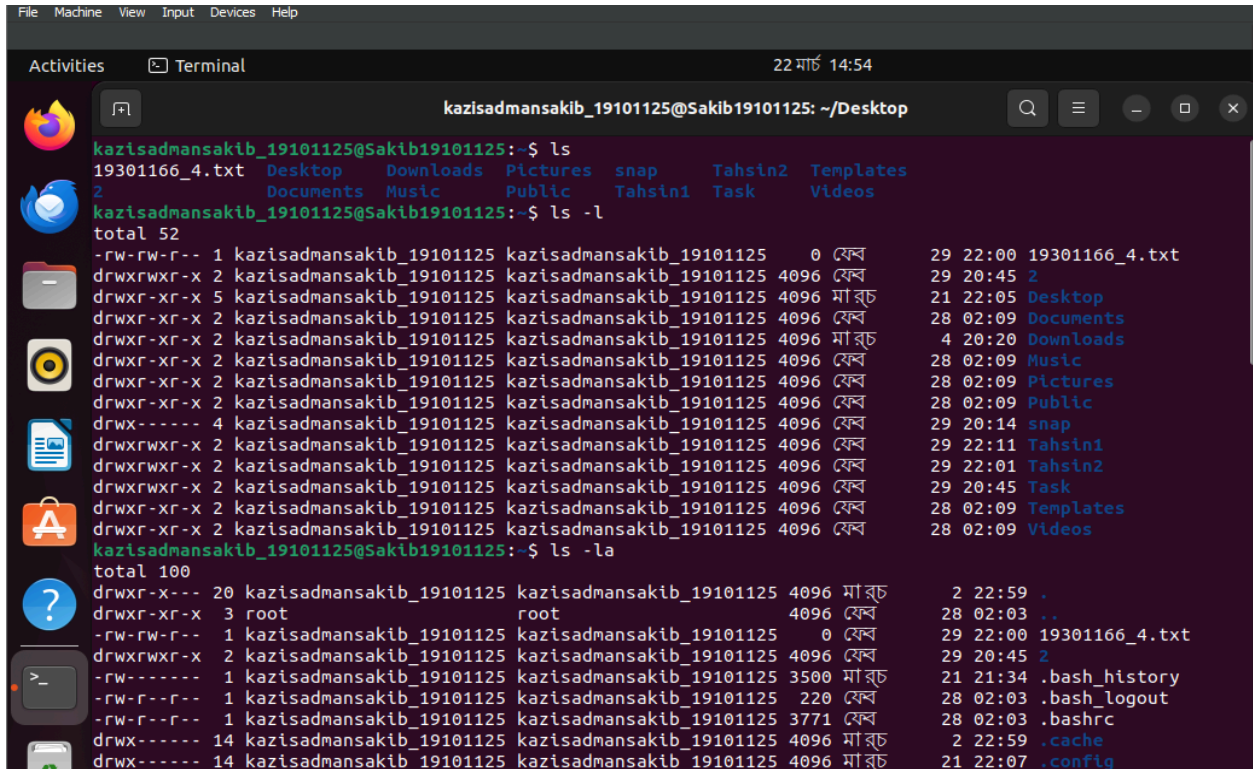
Name: Kazi Sadman Sakib

ID::19101125

Section:01

20 Basic Ubuntu Commands:

Screenshots:



The screenshot shows a terminal window titled "kazisadmansakib\_19101125@Sakib19101125: ~/Desktop". The terminal displays the output of the following commands:

```
kazisadmansakib_19101125@Sakib19101125:~$ ls
19301166_4.txt  Desktop  Downloads  Pictures  snap      Tahsin2  Templates
2              Documents Music      Public   Tahsin1  Task     Videos

kazisadmansakib_19101125@Sakib19101125:~$ ls -l
total 52
-rw-rw-r-- 1 kazisadmansakib_19101125 kazisadmansakib_19101125 0 ফেব 29 22:00 19301166_4.txt
drwxrwxr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 29 20:45 2
drwxr-xr-x 5 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 মা র্চ 21 22:05 Desktop
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 28 02:09 Documents
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 মা র্চ 4 20:20 Downloads
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 28 02:09 Music
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 28 02:09 Pictures
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 28 02:09 Public
drwx----- 4 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 29 20:14 snap
drwxrwxr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 29 22:11 Tahsin1
drwxrwxr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 29 22:01 Tahsin2
drwxrwxr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 29 20:45 Task
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 28 02:09 Templates
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 28 02:09 Videos

kazisadmansakib_19101125@Sakib19101125:~$ ls -la
total 100
drwxr-x--- 20 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 মা র্চ 2 22:59 .
drwxr-xr-x 3 root root 4096 ফেব 28 02:03 ..
-rw-rw-r-- 1 kazisadmansakib_19101125 kazisadmansakib_19101125 0 ফেব 29 22:00 19301166_4.txt
drwxrwxr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 ফেব 29 20:45 2
-rw----- 1 kazisadmansakib_19101125 kazisadmansakib_19101125 3500 মা র্চ 21 21:34 .bash_history
-rw-r--r-- 1 kazisadmansakib_19101125 kazisadmansakib_19101125 220 ফেব 28 02:03 .bash_logout
-rw-r--r-- 1 kazisadmansakib_19101125 kazisadmansakib_19101125 3771 ফেব 28 02:03 .bashrc
drwx----- 14 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 মা র্চ 2 22:59 .cache
drwx----- 14 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 মা র্চ 21 22:07 .config
```

```
File Machine View Input Devices Help
Activities Terminal 22 मार्च 14:55
kazisadmansakib_19101125@Sakib19101125: ~/Desktop
drwxr-xr-x 2 kazisadmansakib_19101125 kazisadmansakib_19101125 4096 28 02:09 Videos
kazisadmansakib_19101125@Sakib19101125:~$ pwd
/home/kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib19101125:~$ cd ..
kazisadmansakib_19101125@Sakib19101125:/home$ pwd
/home
kazisadmansakib_19101125@Sakib19101125:/home$ ls
kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib19101125:/home$ cd
kazisadmansakib_19101125@Sakib19101125:~$ ls
19301166_4.txt Desktop Downloads Pictures snap Tahsin2 Templates
2 Documents Music Public Tahsin1 Task Videos
kazisadmansakib_19101125@Sakib19101125:~$ pwd
/home/kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib19101125:~$ cd Desktop
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ ls
2 'Assignment2_Tahsinul Islam Abir_19301166.zip' tahsin.txt
Assignment courseinformation.txt
Assignment2 tahsin3
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ touch file
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat > file2
Welcome to CSE-484
^Z
[1]+ Stopped cat > file2
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat file2
Welcome to CSE-484
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat >> file2
Hello, I am Kazi Sadman Sakib
^Z
[2]+ Stopped cat >> file2
```

```
kazisadmansakib_19101125@Sakib19101125: ~/Desktop
kazisadmansakib_19101125@Sakib19101125:/home$ pwd
/home
kazisadmansakib_19101125@Sakib19101125:/home$ ls
kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib19101125:/home$ cd
kazisadmansakib_19101125@Sakib19101125:~$ ls
19301166_4.txt Desktop Downloads Pictures snap Tahsin2 Templates
2 Documents Music Public Tahsin1 Task Videos
kazisadmansakib_19101125@Sakib19101125:~$ pwd
/home/kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib19101125:~$ cd Desktop
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ ls
2 'Assignment2_Tahsinul Islam Abir_19301166.zip' tahsin.txt
Assignment courseinformation.txt
Assignment2 tahsin3
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ touch file
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat > file2
Welcome to CSE-484
^Z
[1]+ Stopped cat > file2
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat file2
Welcome to CSE-484
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat >> file2
Hello, I am Kazi Sadman Sakib
^Z
[2]+ Stopped cat >> file2
kazisadmansakib_19101125@Sakib19101125:~/Desktop$ cat file2
Welcome to CSE-484
Hello, I am Kazi Sadman Sakib
kazisadmansakib_19101125@Sakib19101125:~/Desktop$
```

```
Activities Terminal 23 मार्च 22:14
kazisadmansakib_19101125@Sakib-19101125: ~
kazisadmansakib_19101125@Sakib-19101125:~$ whoami
kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib-19101125:~$ hostname
Sakib-19101125
kazisadmansakib_19101125@Sakib-19101125:~$ sudo apt-get update
[sudo] password for kazisadmansakib_19101125:
Get:1 https://download.docker.com/linux/ubuntu jammy InRelease [48.8 kB]
Hit:2 http://us.archive.ubuntu.com/ubuntu jammy InRelease
Get:3 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:4 http://us.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:5 http://us.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:6 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,502 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu jammy-updates/main i386 Packages [594 kB]
Get:8 http://us.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1,059 kB]
Get:9 http://us.archive.ubuntu.com/ubuntu jammy-updates/universe i386 Packages [697 kB]
Get:10 http://us.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [240 kB]
Fetched 4,370 kB in 12s (376 kB/s)
Reading package lists... Done
W: https://download.docker.com/linux/ubuntu/dists/jammy/InRelease: Key is stored
```

```
Activities Terminal 23 मार्च 22:16
kazisadmansakib_19101125@Sakib-19101125: ~
in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
kazisadmansakib_19101125@Sakib-19101125:~$ sudo apt-get upgrade
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages have been kept back:
  ubuntu-advantage-tools ubuntu-pro-client-l10n
The following packages will be upgraded:
 alsa-ucm-conf containerd.io cups cups-bsd cups-client cups-common
cups-core-drivers cups-daemon cups-ipp-utils cups-ppdc cups-server-common
docker-buildx-plugin docker-ce docker-ce-cli docker-ce-rootless-extras
docker-compose-plugin dpkg dpkg-dev libcups2 libcupswm2 libdpkg-perl
libgpgme11 libgpgmepp6 libldap-2.5-0 libldap-common linux-firmware
python3-update-manager update-manager update-manager-core
29 to upgrade, 0 to newly install, 0 to remove and 2 not to upgrade.
Need to get 392 MB of archives.
After this operation, 8,861 kB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 https://download.docker.com/linux/ubuntu jammy/stable amd64 containerd.io amd64 1.6.28-2 [29.7 MB]
Get:2 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 dpkg amd64 1.21.1ubuntu2.3 [1,239 kB]
```

```
Activities Terminal 23 मार्च 22:20
kazisadmansakib_19101125@Sakib-19101125: ~
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
kazisadmansakib_19101125@Sakib-19101125:~$ sudo apt-get install aft
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed
  aft
0 to upgrade, 1 to newly install, 0 to remove and 2 not to upgrade.
Need to get 65.6 kB of archives.
After this operation, 241 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu jammy/universe amd64 aft all 2:5.098-4.1 [65.6 kB]
Fetched 65.6 kB in 2s (41.9 kB/s)
Selecting previously unselected package aft.
(Reading database ... 237496 files and directories currently installed.)
Preparing to unpack .../aft_2%3a5.098-4.1_all.deb ...
Unpacking aft (2:5.098-4.1) ...
Setting up aft (2:5.098-4.1) ...
Processing triggers for man-db (2.10.2-1) ...
kazisadmansakib_19101125@Sakib-19101125:~$ sudo apt-get remove aft
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages will be REMOVED
```

```
Activities Terminal 23 मार्च 22:21
kazisadmansakib_19101125@Sakib-19101125: ~
Removing aft (2:5.098-4.1) ...
Processing triggers for man-db (2.10.2-1) ...
kazisadmansakib_19101125@Sakib-19101125:~$ sudo apt-get autoremove
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
0 to upgrade, 0 to newly install, 0 to remove and 2 not to upgrade.
kazisadmansakib_19101125@Sakib-19101125:~$ free
              total        used        free      shared  buff/cache   available
Mem:      11196616     814968     5694232        39724     4687416     10026776
Swap:      2097148           0      2097148

kazisadmansakib_19101125@Sakib-19101125:~$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
tmpfs           1119664      1520   1118144    1% /run
/dev/sda3       25106692 14055700  9750308   60% /
tmpfs           5598308           0   5598308    0% /dev/shm
tmpfs           5120           4     5116    1% /run/lock
/dev/sda2       524252      6220   518032    2% /boot/efi
tmpfs           1119660      100   1119560    1% /run/user/1000

kazisadmansakib_19101125@Sakib-19101125:~$ du
4      ./ssh
12     ../local/share/keyrings
4      ../local/share/backgrounds
```



```
Activities Terminal 23 मार्च 22:24 Auto cap
kazisadmansakib_19101125@Sakib-19101125: ~

205 history
kazisadmansakib_19101125@Sakib-19101125:~$ uname -a
Linux Sakib-19101125 6.5.0-21-generic #21~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri
Feb 9 13:32:52 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
kazisadmansakib_19101125@Sakib-19101125:~$ top

top - 22:24:01 up 47 min, 1 user, load average: 0.02, 0.23, 0.28
Tasks: 212 total, 1 running, 211 sleeping, 0 stopped, 0 zombie
%Cpu(s): 0.5 us, 0.7 sy, 0.0 ni, 98.7 id, 0.0 wa, 0.0 hi, 0.1 si, 0.0 st
MiB Mem : 10934.2 total, 5512.9 free, 799.8 used, 4621.4 buff/cache
MiB Swap: 2048.0 total, 2048.0 free, 0.0 used. 9787.8 avail Mem

  PID USER      PR  NI    VIRT    RES    SHR S  %CPU  %MEM     TIME+ COMMAND
 17889 kazisad+  20   0 4973672 335940 134176 S   8.1   3.0   0:52.10 gnome-s+
 18453 kazisad+  20   0  562312  51500  39512 S   0.9   0.5   0:04.40 gnome-t+
    16 root      20   0        0        0        0 I   0.3   0.0   0:02.80 rcu_pre+
 17251 root      20   0        0        0        0 I   0.3   0.0   0:00.89 kworker+
 18273 kazisad+  20   0 3067500  63192  45568 S   0.3   0.6   0:00.90 gjs
 32129 root      20   0 2020384  44476  32640 S   0.3   0.4   0:00.57 contain+
    1 root      20   0 167972   12916   8180 S   0.0   0.1   0:04.42 systemd
    2 root      20   0        0        0        0 S   0.0   0.0   0:00.02 kthreadd
    3 root      0 -20        0        0        0 I   0.0   0.0   0:00.00 rcu_gp
    4 root      0 -20        0        0        0 I   0.0   0.0   0:00.00 rcu_par+
    5 root      0 -20        0        0        0 I   0.0   0.0   0:00.00 slub_fl+
```

```
kazisadmansakib_19101125@Sakib-19101125: ~

kazisadmansakib_19101125@Sakib-19101125:~$ man man
kazisadmansakib_19101125@Sakib-19101125:~$ man inro
No manual entry for inro
Thunderbird Mail
kazisadmansakib_19101125@Sakib-19101125:~$ info
kazisadmansakib_19101125@Sakib-19101125:~$ whoami
kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib-19101125:~$ hostname
Sakib-19101125
kazisadmansakib_19101125@Sakib-19101125:~$
```

```
kazisadmansakib_19101125@Sakib-19101125: ~

kazisadmansakib_19101125@Sakib-19101125:~$ man man
kazisadmansakib_19101125@Sakib-19101125:~$ man inro
No manual entry for inro
kazisadmansakib_19101125@Sakib-19101125:~$ info
kazisadmansakib_19101125@Sakib-19101125:~$ whoami
kazisadmansakib_19101125
kazisadmansakib_19101125@Sakib-19101125:~$ hostname
Sakib-19101125
kazisadmansakib_19101125@Sakib-19101125:~$ man info
kazisadmansakib_19101125@Sakib-19101125:~$
```

```
Activities Terminal 23 मार्च 22:22
kazisadmansakib_19101125@Sakib-19101125: ~
kazisadmansakib_19101125@Sakib-19101125:~$ history
1  ls
2  mkdir Task 2
3  cd Task 2
4  cd Desktop
5  mkdir Assignment 1_Tahsinul Islam Abir_19301166
6  mkdir Assignment1_TahsinulIslamAbir_19301166
7  cd Desktop
8  mkdir Task2
9  cd Task2
10 touch task2.c
11  ls
12  gedit task2
13  gcc -o t2 task2
14  gcc -o Task2 task2
15  gcc t2 task2.c
16  gcc -o t2 task2.c
17  gcc task2.c -o task2
18  gcc -o task2 task2.c
19  cd Desktop
20  mkdir Assignment1_19301166
21  ls
22  cd Assignment1_19301166
23  touch Task2.c
```

```
Ubuntu 22.04 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities Terminal 23 मार्च 22:26
kazisadmansakib_19101125@Sakib-19101125: ~
File: dir, Node: Top, This is the top of the INFO tree.
This is the Info main menu (aka directory node).
A few useful Info commands:
'q' quits;
'H' lists all Info commands;
'h' starts the Info tutorial;
'mTexinfo RET' visits the Texinfo manual, etc.
* Menu:
Basics
* Common options: (coreutils)Common options.
* Coreutils: (coreutils). Core GNU (file, text, shell) utilities.
* Date input formats: (coreutils)Date input formats.
* Ed: (ed). The GNU line editor
* File permissions: (coreutils)File permissions.
Access modes.
* Finding files: (find). Operating on files matching certain criteria.
* Time: (time). time
-----Info: (dir)Top, 209 lines --Top-----
```

```
kazisadmansakib_19101125@Sakib-19101125: ~  
MAN(1) Manual pager utils MAN(1)  
  
NAME  
man - an interface to the system reference manuals  
  
SYNOPSIS  
man [man options] [[section] page ...] ...  
man -k [apropos options] regexp ...  
man -K [man options] [section] term ...  
man -f [whatis options] page ...  
man -l [man options] file ...  
man -w|-W [man options] page ...  
  
DESCRIPTION  
man is the system's manual pager. Each page argument given to man is normally the name of a program, utility or function. The manual page associated with each of these arguments is then found and displayed. A section, if provided, will direct man to look only in that section of the manual. The default action is to search in all of the available sections following a pre-defined order (see DEFAULTS), and to show only the first page found, even if page exists in several sections.  
  
The table below shows the section numbers of the manual followed by the Manual page man(1) line 1 (press h for help or q to quit)
```

```
File Machine View Input Devices Help  
Activities Terminal 23 मार्च 22:29  
kazisadmansakib_19101125@Sakib-19101125: ~  
INFO(1) User Commands INFO(1)  
  
NAME  
info - read Info documents  
  
SYNOPSIS  
info [OPTION]... [MENU-ITEM...]  
  
DESCRIPTION  
Read documentation in Info format.  
  
Frequently-used options:  
-a, --all  
    use all matching manuals  
  
-k, --apropos=STRING  
    look up STRING in all indices of all manuals  
  
-d, --directory=DIR  
    add DIR to INFOPATH  
  
-f, --file=MANUAL  
    specify Info manual to visit  
Manual page info(1) line 1 (press h for help or q to quit)
```

1. **sudo apt-get update:** This command Let us know about the new upcoming packages. For example here it is shown that ubuntu jammy-security package is in release
2. **sudo apt-get upgrade:** This command is used for upgrading all the existing packages. Here which packages are going to be updated are written down in 'The following packages will be upgraded' section.
3. **sudo apt-get install:** This command allows us to install a specific available package. For installation we need to simply write down the package name after the command and it will be installed after executing it. In this case, I have installed aft app  
To get the installable packages list 'tab' is used.
4. **Sudo apt-get remove:** This command is used to remove a pre-installed app. In the previous section, apt is installed. Now for removing apt app I'm using the 'sudo apt-get remove' aft command.
5. **Sudo apt-get autoremove:** This command basically removes the unnecessary or less used packages which automatically come while installing an application in ubuntu. Here, it is shown that 2 less used packages are ready to remove and it will free up 973 kb space.
6. **Cd-** This command is used to change the current directory. Here, I want to change the directory to Downloads which was previously home/kazisadmansakib\_19101125. To do that I have to  
execute this command cd Downloads. Now my current directory is home/kazisadmansakib\_19101125/Download
7. **Pwd-** This command shows the current working directory. Right now I'm in home/kazisadmansakib\_19101125/Download which can be found as below
8. **Free-** With this command we can see the available free space in the current directory. Here used space amount is 3038176 and free space amount is 7129220.
9. **Df:** This command shows the available disk space. Here it is showing used space and available free space in separate disks .
10. **Du:** This commands works similar to df commands- showing the current states of individual blocks of disks.
11. **History:** This command basically shows up all the recent commands that were used previously
12. **Uname-a:** This command shows a broad description of the system.
13. **top:** This command shows the description of the ongoing system. Which file is currently running by which user etc are shown.
14. **man man:** Man command basically shows the user manual of a particular command. For example man man will describe the user manual of man command. It gives a descriptive overview about how it actually works.
15. **Man intro:** This command shows the user manual of linux. Here man refers to manual.
16. **Info:** This command usually shows broad information of the manual. Here we see, the basic, compression and other sections are available here where after executing



man intro command these are not shown..

17. **man-h**: Here we know, man basically shows the user manual of the command which is written after it. For example, -h command shows up the disc spaces. Now by giving man-h it will show the manuals of disc spaces and other things related to it.

18. **Whoami**: This command shows the current existing username. Currently my username is kazisadmansakib\_19101125 which is visible here.

19. **Hostname**: This command is used to show the current hostname. It is showing that my current hostname is sakib-19101125

20. **Ls** - This command stands for list, it lists down all the directories and files inside the present working directory or specified directory

21. **ls -l** : This command stands for Long listing, this allows you to see additional details about files like file size, permission, modified time, etc.